# Helping Students to Learn and Think Outside the Box with Entrepreneurship Education



Liang, Chyi-lyi (Kathleen)

University of Vermont
College of Agriculture and Life Sciences
Department of Community Development and Applied Economics
Burlington, Vermont
(802) 656 0754 CLIANG@UVM.EDU



## What Are The Issues?

- ◆ The focus of education has evolved from a singular discipline to multi-discipline and inter-discipline.
- ◆ Educators are not as prepared to transfer knowledge across disciplines.
- ◆ There is lack of incentive and motivation to promote entrepreneurship education.



# Why Do We Care?

- ◆ To build stronger and more competitive labor force.
- ◆ To develop more creative and innovative employees and employers.
- ◆ To break down the barriers in learning and sharing knowledge across disciplines.
- ◆ To help learners learn "how to learn", instead "what to learn."



# Development of Entrepreneurship Education in the US

- **◆** Business schools dominate in entrepreneurship education.
- **◆** Community colleges and technical centers are catching up.
- **◆** Limited educational programs are available in K-12.



#### **Theory Framework Links to Education**

Community Entrepreneurship (CENT) at UVM

To answer the million dollar question "what should we teach in entrepreneurship?", the faculty of CDAE developed a unique pedagogical framework that directly links to the heart of entrepreneurship – opportunity recognition, resource commitment, and new venture creation through teamwork.

This unique framework builds on the value of traditional classroom learning, by incorporating experiential learning as proposed by John Dewey.

(Dewey, 1997; Liang, 2009, 2010)



#### **Experiential Learning**

Initiate creative and innovative project to apply/test theory

Phase 1Phase 2Phase 3Performance

**Engage in activities** 

Participate in discussions, Q & A

**Observe cases and examples** 

Listen to lectures and take notes

#### **Opportunity**

Liang, C. (2009, 2010, 2012 in print). Dollar Enterprise – From Theory to Reality, Kendall Hunt Publishing



# From A Dream Idea To Reality

- ◆ 1998-2002 design, plan, and implement the Community Entrepreneurship major and minor
- ◆ 2002-2005 modify and introduce new Community Entrepreneurship curriculum
- ◆ 2005 introduce Dollar Enterprise to the course, Introduction to Community Entrepreneurship (general introductory course for all years of students)



### **Curriculum – CALS Competencies**

#### **CALS Core Competencies**

- •Communication Skills (1 writing class, 1 speech class)
- •Information Technology Skills (1 computer application class)
- •Quantitative Skills (1 math class, 1 statistics class)
- •Critical Thinking Skills (CENT curriculum requirement specific)
- •Interpersonal Skills (CENT curriculum requirement specific)
- •Knowledge (2 physical and life sciences classes with or without lab; 2 social science classes not including CDAE courses; 2 humanities and fine arts classes)
- •Values (2 diversity classes D1 and D2 for different aspects of diversity; environmental stewardship CENT curriculum specific; personal growth CENT curriculum specific)



#### Curriculum – CDAE Core

General requirement for 3 majors (CENT, PCOM, CID)

CDAE 002 World Food Population & Development

**CDAE 015 Visual Communication** 

**CDAE 061 Community Development Economics** 

**CDAE 102 Sustainable Community Development** 

CDAE 127 Consumer, Markets & Public Policy

**CDAE 250 Research Methods** 

CDAE 191/291 internship or service learning



# **Curriculum – Community Entrepreneurship Core**

**CDAE 157: Consumer Laws And Policy** 

CDAE 166: Introduction To Community Entrepreneurship

**CDAE 167: Financial Analysis For Community** 

**Entrepreneurship** 

CDAE 168: Marketing For Community Entrepreneurship

**CDAE 253: Macroeconomics For Applied Economists** 

**CDAE 254: Microeconomics For Applied Economists** 

**CDAE 255: Applied Consumption Economics** 

**CDAE 266: Decision Making For Community** 

**Entrepreneurship** 

CDAE 267: Strategic Planning For Community

**Entrepreneurs (senior capstone)** 



## **Course Examples – CDAE 166**

(3 credits, introduction course, across majors)

- ♦ Offered every semester, 140 students in each class.
- Organized teams with 10-12 members in each team.
- Combines lectures with experiential learning.
- ◆ Plan and operate <u>Dollar Enterprise following 12-step</u> entrepreneurial procedures.

Preparation and Planning
Aug Sep

Final report and Assessment
Dec

Oct Nov
Operation and Weekly Reporting



### **Objectives of The Dollar Enterprise**

- Provide practices and exercises for individuals to apply business knowledge and personal skills
  - Utilize unwanted wastes to create value added treasure
  - Build strong teamwork and work ethics
  - Exercise creative thinking
  - Enhance analytical skills from all business perspectives
  - Engage in entrepreneurial activities
  - Learn networking skills
  - Contribute to other organizations in communities
  - Have a lot of fun in learning!

# Steps of Dollar Enterprise

- Brainstorm an idea
- Finalizing team (individual's responsibilities) and team building activities
- Finalize and assess products and services
- Identify resources and partnership
- Formulate work routines
- Preparing for an initial business plan and a business model
- Establish rules for team assessment and self-assessment
- Weekly reports and reflections
- Risk assessment and prepare for contingency
- Prepare financial analysis
- Prepare final business report and final assessment/learning reflections
- Arrangement for donations to charity



- Foundation of the reporting and assessment
  - Encourage members' involvement
  - Identify strengths and weaknesses of the team work
  - Provide warning to non-participants and reward overand-beyond participants
  - Evaluate work ethic, professionalism, workload, and communication with other members
- Weekly reports and assessments
- Final/overall report, assessment, and reflection
- Instructor's evaluation and TA's evaluation



PopCorn **Types of Ventures** Tie Dye

Tag Sale

Tack Sale BURRITO

Grilled Cheese **Plant** 

**Trail Mix** 

Music CD

Jewelry

Baked Goods Recycled Arts













#### **Number of Students Enrolled in CDAE 166**

Gender			Year				
	M	F	First Year	Sophomore	Junior	Senior	
2005	88	87	14	61	45	53	
2006	120	90	11	88	57	54	
2007*	65	44	5	43	33	27	
2008	101	108	6	86	64	50	
2009	105	114	8	125	48	36	
2010	109	112	25	100	56	38	
2011**	59	78	14	88	20	11	
Total	647	633	83	591	323	269	

# All proceeds donated to charity and entrepreneurship education foundation

<b>52</b>	Spring 2005	\$1,140.82		
	Fall 2005	\$2,384.18		
	Spring 2006	\$1,261.65		
	Fall 2006	\$1,923.89		
	Spring 2007	\$1,648.10		
	Fall 2007	\$2,090.00		
	Spring 2008	\$2,000.00		
	Fall 2008	\$2,192.40		
	Spring 2009	\$1,930.03		
	Fall 2009	\$3,257.00		
	Spring 2010	\$1,985.70		
	Fall 2010	\$1,944.46		
	Spring 2011	\$3,966.16		
	Total	\$27,724.39		



## **Course Examples – CDAE 267**

(4 credits, capstone for CENT majors)

- ♦ Offered every semester, 30 students in each class.
- **◆** Organized teams with 2-4 members in each team.
- Combines lectures with experiential learning.
  - > Teamwork, opportunity recognition, market, human resource, management, finance, etc.
  - > 5 drafts of the business plan.
  - > 5 presentations.
- ◆ Plan and operate <u>real ventures following 12-step</u> <u>entrepreneurial procedures.</u>



#### **Number of Students Enrolled in CDAE 267**

Semester	M	F	Semester	M	F
S2000	20	7	F2006	12	1
F2000	14	19	S2007	24	8
S2001	22	14	F2007	17	9
F2001	26	13	S2008	27	14
S2002	20	8	F2008	22	12
F2002	14	6	S2009	23	6
S2003	14	2	F2009	7	5
F2003	11	3	S2010	10	6
S2004	14	6	F2010	21	12
F2004	15	6	S2011	10	3
S2005	18	13			
F2005	13	3			
S2006	16	4			
			Grand		
			Total	413	192

# **Conclusions and Implications**

- Can we teach entrepreneurship?
- ◆ Is entrepreneurship an independent discipline?
- What should we teach in entrepreneurship?
- Who can teach entrepreneurship?
- ♦ How do we assess the impact of entrepreneurship education?



Let us think of education as the means of developing our greatest abilities, because in each of us there is a private hope and dream which, fulfilled, can be translated into benefit for everyone and greater strength for our nation.

John F. Kennedy (1917-1963) Thirty-fifth President of the USA



